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What is claimed is:

In a motor/gear drive wherein a motor 1. 1 shaft has a worm gear carried thereon and a tip end 2 terminating in an end wall, a bore in a motor/gear 3 housing coaxial with the output shaft, the improvement 4 comprising: 5 an annular sleeve condentrically disposed about 6 a tip end portion of a drive shaft and nominally spaced 7 from the tip end portion; and 8 wherein the sleeve supportingly engages the tip 9 end portion of the drive shaft, under radial loads acting 10 to deflect the drive shaft. 11 The improvement of claim 1 wherein the 2. 1 sleeve is an injection molded sleeve. 2 The improvement of claim 1 wherein: 3. 1 the sleeve has a bore extending therethrough, 2 the bore having an inner diameter larger than the outer 3 diameter of the tip end portion of the shaft. 4 The improvement of claim 1 further 4. 1 2 comprising: a thrust member disposed in the bore in the 3 housing in coaxial registry with the end wall of the shaft; and wherein the engagement of the thrust member with the end wall of the drive shaft prevents axial movement of the drive shaft. The improvement of claim 4 wherein: 5. 1 the thrust member is an injection molded thrust 2 3 member. In a motor/gear drive wherein a motor 6. 1 shaft has a worm gear carried thereon and a tip end

terminating in an end wall, a bore in a motor/gear

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housing coaxial with the output shaft, the improvement comprising:

a thrust member disposed in the bore in the housing in coaxial registry with the end wall of the shaft; and

wherein the engagement of the thrust member with the end wall of the drive shaft prevents axial movement of the drive shaft.

The improvement of claim 6, wherein: 7. the thrust member is an injection molded thrust member.

A method of manufacturing a motor/gear drive wherein the motor/gear drive has a drive shaft carrying a worm gear, and a tip end portion terminating in an end wall, the method comprising the steps of:

forming a bore in a motor/gear drive housing, the bore having a first bore portion of a first diameter and an axially endmost, coaxial, second bore portion of a smaller diameter;

forming a shoulder between the first and second bore portions;

forming a first gate in the housing communicating with the first bore portion;

inserting a mold core into the housing, the mold core having a first end portion with a diameter larger than the outer diameter of the tip end portion of the drive shaft and a second larger diameter portion with a shoulder formed between the first and second portions sealingly closing the first bore portion in the housing, the first bore portion and the end portion of the mold core forming an interior cavity therebetween;

injecting molter plastic into the interior cavity through the first gate to form a sleeve having an inner diameter surface surrounding a hollow bore; and removing the mold core.

1	 The method of claim 8 further comprising
2	the steps of:
3	forming a bearing mounting surface in the
4	housing; and
5	forming the mold core with a surface engagable
6	with the bearing surface in the housing to concentrically
7	align the mold core and the first bore portion in the
8	housing.
1	10. The method of claim \$ further comprising
2	the steps of:
3	forming a first flange on the housing;
4	forming a second flange on the mold core; and
5	engaging the first and second flanges to align
6	a longitudinal axis of the mold core with an axis
7	extending through the first bore portion.
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1	11. The method of claim 8 further comprising
2	the steps of:
3	forming a second gate in the housing
4	communicating with the second bore portion;
5	forming an end wall of the drive shaft with an
6	outer diameter larger than the diameter of the second
7	bore portion;
8	disposing the end wall of the drive shaft to
9	sealingly close off and end of the second bore portion;
10	inserting the drive shaft of the motor/gear
11	drive into the housing with the tip end portion of the
12	drive shaft extending through the first bore portion;
13	disposing the end wall of the drive shaft to
14	sealing close the second bore portion; and
15	injecting molten plastic through the second
16	gate into the second bore portion to form a thrust member
17	in the second pore portion in registry with the end wall
18	of the drive shaft.

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12. A method of manufacturing a motor/gear
drive wherein the motor/gear drive has a drive shaft
carrying a worm gear, and a tip end portion terminating
in an end wall, the method comprising the steps of:
forming a second gate in the housing
communicating with the second bore portion;
forming an end wall of the drive shaft with an
outer diameter larger than the diameter of the second
bore portion;
disposing the end wall of the drive shaft to
sealingly close off an end of the second bore portion;
inserting the drive shaft of the motor/gear
drive into the housing with the tip end portion of the
drive shaft extending through the first bore portion;
disposing the end wall of the drive shaft to
sealing close the second bore portion; and
injecting molten plastic through the second
gate into the second bore portion to form a thrust member
in the second bore portion in registry with the end wall
of the drive shaft.
13. A method of manufacturing a motor/gear
drive wherein the motor/gear drive has a drive shaft
carrying a worm gear, and a tip end portion terminating
in an end wall, the method comprising the steps of:
forming a bore in a motor/gear drive housing,
the bore having a first bore portion of a first diameter
and
injection molding a sleeve in the first bore
portion, the sleeve having a through bore with an inner
diameter larger than the outer diameter of a tip end

A method of manufacturing a motor/gear drive wherein the motor/gear drive has a drive shaft

portion of the motor/gear drive shaft.

carrying a worm gear, and a tip end portion terminating
in an end wall, the method comprising the steps of:
forming a bore in a motor/gear drive housing,
the bore receiving a tip end portion of a drive shaft;
and
injection molding a thrust member in the
housing in registry with the tip end portion of the drive
shaft, the thrust member limiting axial movement of the
drive shaft.

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